

REMARKS

The Examiner erroneously examined claims 1-6 as originally filed in the International application ("original claims"), instead of claims 1-5 which were presented under Article 19 and/or 34 and considered during the international phase ("Article 19 claims"). When this application was filed, Applicant requested that the Article 19 claims be entered and considered for purposes of prosecution of this application. Linda Palomar, counsel for Applicant, spoke with the Examiner on March 18, 2009 regarding this matter. The Examiner advised that the new limitation in claim 1 of the Article 19 claims was in claim 5 of the original claims, and therefore, the same rejection would stand. The Examiner requested that we respond on this basis and amendments be made from the Article 19 claims. Therefore, claims 1-5 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over United States Patent No. 7,111,624 to Thudor in view of United States Patent No. 4,152,379 to Suhr.

Applicant has amended independent claim 1 of this application to clarify the structure of the elongate flow tube. Independent claim 1 now requires the opening at the distal end of the flow tube to be transverse to the axis of the tube *at the distal end*. Independent claim 1 also requires the distal end of the tube being shaped in a smooth curve to provide a barrier to water. Both amendments clarify the configuration of the elongate flow tube. The orientation of the opening and the shape of the flow tube distal end reduce noise generation (resulting from air passing through the chamber) and the potential for water to enter the gases port. Both of these concerns are identified as objectives the invention addresses. Support for the orientation of the opening is in FIGS. 2-6 and 8 of the United States published application No. 2007/0230927.

Support for the specific shape of the tube distal end is in paragraph [0026] of the United States published application No. 2007/0230927.

The Examiner alleges that Thudor “shows the path of the gas as intended to turn transverse to the inlet. This constitutes applicants improvement over the admitted prior art.” The figures of Thudor referenced by the Examiner illustrate a schematic flow path for gases passing through the humidification chamber.

The flow path illustrated in FIG. 5 of Thudor depicts the gases flow exiting the inlet in a direction collinear with the inlet. The schematic flow path only deflects after meeting the chamber wall, where the gases proceed downwardly toward the liquid stored in the chamber. The illustrated flow path does not exit the flow tube transverse to the longitudinal axis of the tube.

The Examiner’s assertion that the illustrated flow path constitutes Applicant’s improvement over the prior art is inconsistent with the claims defining the water chamber and ignores the specific chamber structure recited. The claimed flow tube configuration (with outlet transverse to the tube axis and not facing downwards) reduces the potential for water entering the gases ports by providing a barrier to water splashes. Furthermore, the smooth shape of the tube distal end and orientation of the opening reduces noise generation. Both of these concerns are particularly relevant to slide-on humidification chambers where one or more of the gases ports are commonly positioned horizontally in a wall of the chamber.

The Examiner alleges the claimed humidifier configuration is rendered obvious by Thudor and Suhr. In particular, the Examiner asserts that “it would have been obvious to modify

Dickinson to point the inlet gas downward to enhance circulation within the vessel as suggested by Suhr". Applicant assumes that the Examiner meant Thudor, not Dickenson.

Independent claim 1 explicitly recites that the opening face a direction transverse to a tube longitudinal axis and the transverse direction **not** be downwards. Accordingly, the modification to the prior art proposed by the Examiner does not meet the limitations of independent claim1, even if there were reason to combine the teachings of the respective references.

None of the references cited by the Examiner (Thudor, Suhr or Dickenson) disclose an elongate flow tube with an opening facing transverse to the tube longitudinal axis as explicitly recited in amended independent claim 1. The references cited by the Examiner each disclose flow tubes with openings aligned with the axis of the tube at the opening. Furthermore, none of the cited references suggest a configuration capable of meeting the specifically defined objectives of the present application.

As the combination of references cited by the Examiner do not disclose the limitations of independent claim1, provide motivation to combine their respective teachings, or suggest a solution to the identified objectives, it would **not** be obvious to one skilled in the art to make the modification proposed by the Examiner without hindsight. Reconsideration and withdrawal of the rejection of claim 1 is requested.

Claims 2-5 are dependent upon claim 1 which Applicant submits is allowable. Therefore, Applicant submits that claims 2-5 are allowable. Reconsideration and allowance 7 is requested.

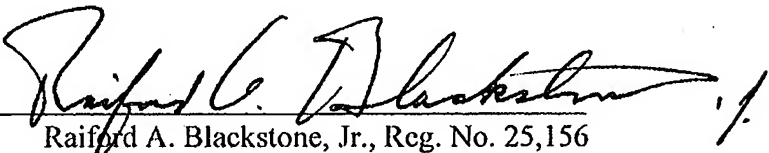
Applicant has added new dependent claims 6 and 7 which require the flow tube to incorporate a drain hole in an air bleed aperture respectively. New claim 6 is dependent on claim

1 and requires a drain hole positioned at a low point of the flow tube for draining water back into the chamber. Support for new claim 6 is in paragraph [0025] of the United States published application No. 2007/0230927. New claim 7 is dependent on claim 1 and requires an air bleed aperture located on a top surface of the flow tube. Support for new dependent claim 7 is in paragraphs [0029] and [0030] of United States published application No. 2007/0230927. Claims 6 and 7 are dependent upon claim 1 which Applicant submits is allowable. Consideration and allowance of claims 6 and 7 is requested.

Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

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